

1744



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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/983,536

DATE: 03/04/2002
TIME: 08:35:16

Input Set : A:\620-173.app
Output Set: N:\CRF3\03042002\I983536.raw

3 <110> APPLICANT: Carrillo, Nestor J
4 Valle, Estela M
5 Tognetti, Vanesa B
6 Palatnik, Javier F
7 Castejon, Maria FF
9 <120> TITLE OF INVENTION: Stress Tolerant Plants
11 <130> FILE REFERENCE: 620-173
13 <140> CURRENT APPLICATION NUMBER: US 09/983,536
14 <141> CURRENT FILING DATE: 2001-10-24
16 <160> NUMBER OF SEQ ID NOS: 6
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 706
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleic acid
27 molecule encoding fusion polypeptide
29 <400> SEQUENCE: 1
30 ggatccatca tcaacaacaa caacaaacat ggctgctgca gtaacagccg cagtcctc 60
31 gccatactcc aactccactt cccttccgat cagaacatct attgttgac cagagagact 120
32 tgtcttcaaa aaggtttcat tgaacaatgt ttctataagt ggaagggttag gcaccatcg 180
33 agctctcata atgtcaaaga aaattggttt attctacggt actcaaactg gtaaaactga 240
34 atcagtagca gaaatcattc gagacgagtt tggtaatgat gtggtgacat tacacgatgt 300
35 ttcccaggca gaagtaactg acttgaatga ttataaatat ttgattatgg gctgtcctac 360
36 ttggaatatt ggcgaactgc aaagcgattt ggaaggactc tattcagaac tggatgtatgt 420
37 agattttaaat ggtaaattgg ttgcctactt tggactggt gaccaaataag gttacgcaga 480
38 taattttcag gatgcgatcg gtatttgga agaaaaatt tctcaacgtg gtggtaaaac 540
39 tgtcggtat tggtaactg atggatatga tttaatgat tccaaggcac taagaaatgg 600
40 caagtttgcgactgct ttgatgaaga taatcaatct gacttaacag acgatcgcat 660
41 caaaaagggttgg gttgctcaat taaaagtctga atttgggttgg taaaaaa 706
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 233
46 <212> TYPE: PRT
47 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Description of Artificial Sequence: Predicted
51 protein sequence of transit peptide and flavodoxin
52 protein
54 <400> SEQUENCE: 2
55 Asp Pro Ser Ser Thr Thr Thr Asn Met Ala Ala Ala Val Thr Ala
56 1 5 10 15
58 Ala Val Ser Leu Pro Tyr Ser Asn Ser Thr Ser Leu Pro Ile Arg Thr

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| | | | | |
|-----|----------------------------------------------------------------------|-----|-----|-----|
| 59 | 20 | 25 | 30 | |
| 61 | Ser Ile Val Ala Pro Glu Arg Leu Val Phe Lys Lys Val Ser Leu Asn | | | |
| 62 | 35 | 40 | 45 | |
| 64 | Asn Val Ser Ile Ser Gly Arg Val Gly Thr Ile Arg Ala Leu Ile Met | | | |
| 65 | 50 | 55 | 60 | |
| 67 | Ser Lys Lys Ile Gly Leu Phe Tyr Gly Thr Gln Thr Gly Leu Thr Glu | | | |
| 68 | 65 | 70 | 75 | 80 |
| 70 | Ser Val Ala Glu Ile Ile Arg Asp Glu Phe Gly Asn Asp Val Val Thr | | | |
| 71 | 85 | 90 | 95 | |
| 73 | Leu His Asp Val Ser Gln Ala Glu Val Thr Asp Leu Asn Asp Tyr Gln | | | |
| 74 | 100 | 105 | 110 | |
| 76 | Tyr Leu Ile Ile Gly Cys Pro Thr Trp Asn Ile Gly Glu Leu Gln Ser | | | |
| 77 | 115 | 120 | 125 | |
| 79 | Asp Trp Glu Gly Leu Tyr Ser Glu Leu Asp Asp Val Asp Phe Asn Gly | | | |
| 80 | 130 | 135 | 140 | |
| 82 | Lys Leu Val Ala Tyr Phe Gly Thr Gly Asp Gln Ile Gly Tyr Ala Asp | | | |
| 83 | 145 | 150 | 155 | 160 |
| 85 | Asn Phe Gln Asp Ala Ile Gly Ile Leu Glu Glu Lys Ile Ser Gln Arg | | | |
| 86 | 165 | 170 | 175 | |
| 88 | Gly Gly Lys Thr Val Gly Tyr Trp Ser Thr Asp Gly Tyr Asp Phe Asn | | | |
| 89 | 180 | 185 | 190 | |
| 91 | Asp Ser Lys Ala Leu Arg Asn Gly Lys Phe Val Gly Leu Ala Leu Asp | | | |
| 92 | 195 | 200 | 205 | |
| 94 | Glu Asp Asn Gln Ser Asp Leu Thr Asp Asp Arg Ile Lys Ser Trp Val | | | |
| 95 | 210 | 215 | 220 | |
| 97 | Ala Gln Leu Lys Ser Glu Phe Gly Leu | | | |
| 98 | 225 | 230 | | |
| 101 | <210> SEQ ID NO: 3 | | | |
| 102 | <211> LENGTH: 162 | | | |
| 103 | <212> TYPE: DNA | | | |
| 104 | <213> ORGANISM: Pisum sativum | | | |
| 106 | <400> SEQUENCE: 3 | | | |
| 107 | atggctgctg cagtaacagc cgcagtctcc ttgccatact ccaactccac ttcccttccg 60 | | | |
| 108 | atcagaacat ctattttgc accagagaga cttgtttca aaaaggttc attgaacaat 120 | | | |
| 109 | gtttctataa gtggaaagggtt aggcaccatc agagctctca ta 162 | | | |
| 112 | <210> SEQ ID NO: 4 | | | |
| 113 | <211> LENGTH: 54 | | | |
| 114 | <212> TYPE: PRT | | | |
| 115 | <213> ORGANISM: Pisum sativum | | | |
| 117 | <400> SEQUENCE: 4 | | | |
| 118 | Met Ala Ala Ala Val Thr Ala Ala Val Ser Leu Pro Tyr Ser Asn Ser | | | |
| 119 | 1 | 5 | 10 | 15 |
| 121 | Thr Ser Leu Pro Ile Arg Thr Ser Ile Val Ala Pro Glu Arg Leu Val | | | |
| 122 | 20 | 25 | 30 | |
| 124 | Phe Lys Lys Val Ser Leu Asn Asn Val Ser Ile Ser Gly Arg Val Gly | | | |
| 125 | 35 | 40 | 45 | |
| 127 | Thr Ile Arg Ala Leu Ile | | | |
| 128 | 50 | | | |
| 131 | <210> SEQ ID NO: 5 | | | |

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132 <211> LENGTH: 23
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
139 <400> SEQUENCE: 5
140 gacgagctct cataatgtca aag 23
143 <210> SEQ ID NO: 6
144 <211> LENGTH: 25
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
151 <400> SEQUENCE: 6
152 actgtcgact ttttacaaac caaat 25

VERIFICATION SUMMARY
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